Executive Force Preservation Board Alcohol and PTSD

RDML M. H. ANDERSON, MC, USN
The Medical Officer to The Marine Corps

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Alcohol and PTSD

- Increase in alcohol misuse among OEF/OIF veterans
  - 12% for OEF/OIF veterans vs. 3-5% for general population (Banys, 2010)

- Historically, PTSD, depression, and TBI are risk factors for alcohol misuse (RAND, 2008)
  - Vietnam veterans with chronic PTSD have 75% lifetime incidence of substance abuse or dependence
  - Depressed people are 3 times more likely to be alcohol-dependent
  - VA study of OEF/OIF veterans with TBI showed 26% also had alcohol abuse/dependence
  - 80% of civilian ER patients with new TBI met criteria for alcohol abuse and dependence (alcoholics have more falls, fights, and car accidents)

- In PTSD, alcohol likely to be used as self-medication for symptoms; treatment of PTSD may mitigate alcohol abuse, but research results are mixed

- In depression, alcohol is likely to cause or worsen disorder; both conditions need intervention for successful treatment

Alcohol and PTSD

	USMC	Army	
PTSD	1.9%	3.4%	AFHSC, 2010
Depression	3.2%	6.6%	AFHSC, 2010
Alcohol Dependence	1.9%	2.3%	AFHSC, 2010
TBI (2000-2011)	28,062	92,284	DVBIC, 2011

- Civilian alcohol dependence in 18-29-year-old white males (15.1%) (NESARC, 2002)

- Alcohol abuse detected on post-deployment screening (11.8% of Army soldiers positive on PDHRA) has very low rate of referral for treatment (0.2%) (Milliken, 2007)

Mental Disorders - USMC

	CY 2007			CY 2008			CY2009			CY2010 [a]		
	Number of New Cases	Rate of New Cases[b]	% Population Affected	Number of New Cases	Rate of New Cases	% Population Affected	Number of New Cases	Rate of New Cases	% Population Affected	Number of New Cases	Rate of New Cases	% Population Affected
PTSD	1758	9.7	1.2	2101	11.0	1.7	1869	9.4	1.8	959	9.7	1.9
Major Depression	2244	12.6	2.2	2975	15.7	2.7	3001	15.3	3.0	1362	14	3.2
Bipolar Disorder	209	1.1	0.1	272	1.4	0.1	284	1.4	0.2	123	1.2	0.2
Alcohol Dependence	1481	8.2	1.7	1720	9.0	1.8	1710	8.6	1.9	856	8.7	1.9
Substance Dependence	215	1.2	0.1	329	1.7	0.2	338	1.7	0.2	190	1.9	0.2
Service members with any condition	4396	25.1	4.3	5260	28.4	4.3	5127	26.7	5.5	2398	25.3	5.7

(AFHSC 2010)

[a]CY2010 through second quarter

[b]Rate of new cases per 1000 cases per year

Alcohol and PTSD

- Alcohol is a drug
  - Used for self-medication for PTSD
  - Addiction potential

- Alcohol is a poor sleep medication
  - Causes unconsciousness, but poor quality sleep
  - Interferes with deep sleep, REM sleep

- Alcohol may interact with other medications
  - Should be included in an evaluation of medications especially in the context of polypharmacy
  - Interaction with opiates, benzodiazepines may be fatal
  - In 2009 in the U.S. there were 4.6 million drug-related ED visits
    - 50% for adverse reactions to drugs taken as prescribed
    - 45% for drug abuse
    - 11% involved alcohol taken with other drugs

Alcohol and Resiliency

- Psychological resiliency is the preservation of mental and physical function in the presence of stress by psychological means

- The brain, specifically the frontal lobes, is the “Suck it up!” organ responsible for executive functions which allow adaptation to stress:
  - Identification of novel patterns and situations
  - Planning for novel situations
  - Recognition of secondary consequences
  - Working memory
  - Concentration
  - Impulse control
  - Judgment
  - Filtering distractions
  - Control of autonomic responses

Alcohol and Resiliency

- Alcohol use may interfere with psychotherapy for PTSD
  - Diminished frontal lobe function (judgment, planning, impulse control, memory, concentration) due to alcohol abuse

- Alcohol use may interfere with psychological resiliency
  - Diminished frontal lobe activity and executive function
  - Long-term alcohol abuse causes frontal lobe atrophy

- Alcohol misuse may interfere with resiliency building programs which work by enhancing executive psychological function, for example:
  - Comprehensive Soldier Fitness built on Cognitive Behavioral Therapy (CBT)
  - Mind Fitness Training based on mindfulness skills training

Recommendations

- Problem: Low rate of referrals for Marines who indicate alcohol problems on post-deployment screenings
  - Person-to-Person Mental Health Assessments (MHA) will provide more extensive screening for mental health issues predeployment, and 3-6 months, 7-12 months, and 16-24 months postdeployment.
  - Training for providers in administering the MHA will provide guidance for screening and follow-up for Marines with mental health issues, particularly PTSD, depression, and alcohol abuse.
  - Implementation is being coordinated with BUMED and Navy Medicine and is scheduled for IOC in September 2011.
- Recommendation: USMC should make preparations for implementation of Person-to-Person Mental Health Assessments.

  - Integration of mental health support into primary care in the Marine-Centered Medical Home
    - Face-to-face screening for Marines that have not deployed
    - Educate primary care providers
    - Rapid consultation
- Recommendation: Navy Medicine program – for information only

Recommendations

- Problem: Alcohol misuse is a factor which interferes with psychological resiliency through impairment of executive functions in the frontal lobes of the brain.

- Recommendations:
  - 1. Identify executive functions in the frontal lobes of the brain as important factors in psychological resilience when developing resilience programs.
  - 2. Employ techniques which support improved executive functioning when developing resilience programs.
  - 3. Identify alcohol abuse as a factor which impairs resiliency when developing alcohol abuse prevention programs.